

TABLE 5.3.13.2—Planned Projects Under the Proposed Action and Associated Waste Projections

| Project Title | Project Description^a | Expected Waste Streams and Quantities |
|---|--|---|
| D&D Building 194 line of flight tube | D&D project | No changes to routine waste generation. Several tons of debris would be disposed. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. |
| D&D Building 808 | D&D project | No changes to routine waste generation. Assuming 1,500 ft ² removed, 9 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| D&D Building 412 | D&D project | No changes to routine waste generation. Assuming 29,000 ft ² removed, 190 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| D&D Building 175 North Section | D&D project | No changes to routine waste generation. Assuming 16,000 ft ² removed, 100 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| D&D Building 212 ITC Accelerator Building | D&D project | No changes to routine waste generation. Assuming 60,000 ft ² removed, 360 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

| Project Title | Project Description^a | Expected Waste Streams and Quantities |
|--|---|---|
| D&D Building 251 | EPD heavy element handling facility. | No changes to routine waste generation. Assuming 32,000 ft ² removed, 190 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| D&D Building 419 | EPD materials handling and processing facility. | No changes to routine waste generation. Assuming 8,000 ft ² removed, 48 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| D&D Building 171 | Storage building. | No changes to routine waste generation. Assuming 9,000 ft ² removed, 54 tons of debris would be generated. Building is part of 820,000 ft ² of excess properties to be removed. Potential for nonroutine TSCA waste. It is estimated that only 0.350 metric tons per 1,000 ft ² would be LLW, mixed waste, or hazardous. Much of the total debris would be diverted, recycled, or reclaimed (67% would be diverted). |
| Increased administrative limit for plutonium in Superblock | Increase to 1,400 kg fuel-grade Pu, 500 kg enriched uranium, and 3,000 kg depleted and natural uranium. | No changes to routine waste generation. |
| Energetic Materials Processing Center | Consolidates some existing high explosives operations into modern facility. | Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| Increased Tritium Facility material limits | Increase MAR to 30 grams tritium and tritium limits to 35 grams. | New operation would be expected to generate: Hazardous: No change LLW: 4 m ³ /yr TRU: 0 Municipal Solid Waste: No change D&D work: approximately 2 tons per 1,000 ft ² , 20-40 m ³ LLW |

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

| Project Title | Project Description^a | Expected Waste Streams and Quantities |
|--|---|--|
| Increased MAR limit for Plutonium Facility | Increase from 20 kg to 40 kg fuel-grade equivalent plutonium in each of two rooms. | No change to routine waste generation. |
| Materials Science Modernization Project | Research complex to conduct NNSA program precision fabrication and materials experiments. | Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| High Explosives Development Center | Replace and modernize chemistry and materials science facilities. | Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| Berkeley Waste Drums | Transport LBNL mixed TRU waste drums to LLNL for shipment to WIPP. | No changes to routine waste generation. |
| Projected Increase in Worker Population | Approximately 10 percent increase in workforce across LLNL. | 10 percent increase across all categories. |
| Building Utilities Upgrade | Upgrades to building utilities systems for technological or maintenance reasons. | Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| Building Seismic Upgrades | Upgrades for buildings seismic deficiencies. | Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| CBNP Expansion | New technologies for Chemical and Biological Nonproliferation Program. | Very low volumes of chloroform, formaldehyde and biological waste. |
| Petawatt Laser Prototype | Develop petawatt capability in Building 381. | New operation would be expected to generate. Hazardous: several metric tons per year LLW: 0 TRU: 0 Municipal Solid Waste: several metric tons per year Construction: approximately 2 tons per 1,000 ft ² |

TABLE 5.3.13.2–2.—Planned Projects Under the Proposed Action and Associated Waste Projections (continued)

| Project Title | Project Description ^a | Expected Waste Streams and Quantities |
|----------------------------------|---|--|
| NIF Materials | NNSA proposed experiments with materials. | New operation would be expected to generate: Hazardous: 15 metric tons per year LLW: 191.6 m ³ /yr MLLW: 6.9 m ³ per year TRU: none Municipal Solid Waste: several metric tons per year Construction: approximately 2 tons per 1,000 ft ² |
| NIF Neutron Spectrometer | Add neutron spectrometer to the NIF. | New operation would be expected to generate: Hazardous: none Municipal Solid Waste: (included in site-wide quantities) Construction: approximately 2 tons/1,000 ft ² |
| Consolidated Security Facility | 50K gross square feet facility to house Security Department support staff; currently collocated. | No changes to routine waste generation. Consolidation of existing operations. Construction wastes would be expected, approximately 2 tons per 1,000 ft ² . |
| Building 696R Mixed Waste Permit | Permit modification to authorize managing hazardous and mixed waste in Building 696 (currently manages TRU wastes only). Replaces capability of Building 280. | No changes to routine waste generation. Consolidation of existing operations. |

Source: TtNUS 2003.

^a Detailed project descriptions are provided in Appendix A.

CBNP = Chemical and Biological National Security; D&D = decontamination and decommissioning; EPD = Environmental Protection Department; ft² = square foot/feet; K = thousand; kg = kilograms; LBNL = Lawrence Berkley National Laboratory; LLW = low-level waste; LLNL = Lawrence Livermore National Laboratory; m³/yr = cubic meters per year; MAR = material-at-risk; MLLW = mixed low-level waste; NIF = National Ignition Facility; PSA = project specific analysis; TRU = transuranic; TSCA = *Toxic Control Substance Act*; WIPP = Waste Isolation Pilot Plant.